

Amendment to the Drawings

The attached Replacement Drawing sheet includes changes to Figs. 1, 2 and 3, wherein the said changes consist of presenting the numbers without a circle around them and moving of the arrowhead in number 13 to the particular part of the Figure wanted to be number with the said number: the upper bristle group. An Annotated Sheet Showing the Changes is also included. The said Amendment to the Figures are believed to overcome the objections raised by the Office on pages 4 and 5 of the Office Action.

Remarks/Arguments

I. Objection to the Specification

The Examiner has objected two sections of the specification. On one hand, the Office indicates that “the information on page 12, line 8 to page 13, line 3 should not be part of the summary of the invention”. On the second hand, the Office also objected the information from page 18, line 12 to page 19 line 2 based upon the general statement that it “is not a description of the preferred embodiment”. It should be noticed that there is no reasoning or explanation supporting such objections to the specification.

While Applicant respectfully disagrees with the said objections to the specification regarding the contents of the said information, the said objected information has been deleted from the specification in order to advance the prosecution of the case. Therefore, it is believed that the said objections to the specification have been properly addressed.

II. Objection to the Drawings

The Office has objected the drawings because the reference numbers marking particular parts of the said drawings are enclosed in circles and furthermore, the number 13 does not point out to the particular part of the drawing intended to. More particularly, the said number 13 should point out to the upper bristle group.

A new set of drawings wherein the numbers are NOT enclosed in circles are hereby provided. Similarly, a more particular pointing of arrowhead in number 13 is indicated in the replacement drawings, in such a way that there should not be any doubt as to whether the said particular arrow is pointing. Please note that the said changes have been presented in a Replacement Drawing Sheet and they have been shown in an Annotated Sheet. Therefore, it is believed that the said objections have been properly addressed.

III. Claims Rejections under 35 USC 112

Claim 4 has been rejected under 35 USC 112, second paragraph. The Office considered that claim 4 is indefinite, since there are two “access cover” one for the cartridge housing and another for the battery housing “but does not use any terminology which would differentiate them”. Applicant respectfully maintains that the Office has been unable to properly identify each one of the said “access cover”, although the description of the tooth brush, together with the provided drawings clearly define Applicant’s invention. Although Applicant disagrees with the said indefiniteness determination, the said claim has been canceled and presented accordingly to the Examiner’s recommendation in order to advance the prosecution of the case. Thus, it is believed that the subject matter of the said claim, now presented in new claim 9 is more definite and that it should no longer be considered indefinite.

IV. Claims Rejection under 35 USC 103

Claims 1 through 5 were rejected under 35 USC 103 as being unpatentable over a series of references. Due to the fact that the said rejections under 35 USC 103 are considered improper and confusing, each one of the said rejections will be discussed in detail, regardless of the fact that claims 1-5 have been canceled and the subject matter embraced in the said claims are now being presented in new claims 6 to 12. Applicant would like to point out for the record that the said cancellation of claims 1-5 does not respond to the Office’s rejection of said claims under 35 USC 103. The said cancellation and newly presented same subject matter is done in order to claim Applicant’s invention in an even more clear and organized manner and to further advance the prosecution of the case. No new matter has been included in the new set of claims.

Thus, said claim cancellation does not result from to the rejection of claims 1-5 under 35 USC 103, since the said rejection is hereby traversed. Indeed, technically the said rejection may be considered moot in view of the fact that the rejected claims 1-5 are no longer active in the case since the said claims 1-5 have been canceled.

Applicant respectfully disagrees with the presented rejection under 35 USC 103 since the Office has failed to establish a prima facie case of obviousness. It is noticed that the said rejection lacks specificity since none of the cited references had been properly identified by its patent number. Additionally, there is no citation as to the particular place in the cited reference wherein each one of the particular alleged disclosure can be found.

Even more importantly, the following discussion shows the lack of the basic legal principles in the said rejection. It is pointed out for the record that the said legal standards are mandatory in establishing an obviousness determination. The following analysis is presented in order to clearly explain the lack of legal principles in the herein traversed rejection:

A) Legal Considerations in Obviousness determination

Whenever a rejection under 35 USC 103 is imposed, it is legally mandatory that the Office applies an objective analysis using as a guide the obviousness determination of **Graham v. John Deere Co.** The required Graham factors to be considered are:

- a) Determining the scope and contents of the prior art;
- b) Ascertaining the differences between the prior art and the claims in issue
- c) Resolving the level of ordinary skill in the pertinent art; and
- d) Evaluating objective evidence of non-obviousness, known as secondary considerations.

The said principle points of analysis **must** be clearly applied in order to make an objective determination of obviousness. The Examiner is respectfully reminded that these four factual inquires enunciated in *Graham* need to be applied in order to sustain a legal and proper obviousness determination, see *Graham v. John Deer*, 383 US1, 148 USPQ 459 (1966) and MPEP chapter 21, Section 2141.

Additionally, the obviousness analysis **must** include the followings tenets of patent law:

- (a) The claimed invention **must** be considered as a whole-the Office should consider the entire content of the invention.
- (b) The reference or references **must** be considered as a whole, **must** disclose all the limitations of the claims and **must** suggest the desirability and thus the obviousness of making the combination;
- (c) The reference(s) **must** be viewed without the benefit of impermissible hindsight vision afforded by the claimed invention; and
- (d) Reasonable expectation of success is the standard with which obviousness is determined.

In the instant case, the Office Action lacks the fundamental legal analysis to sustain a prima facie case of obviousness since there is no analysis at all as showed below:

B) The Claimed Invention

The instant invention is directed to a toothbrush for the prevention and treatment of tooth sensitivity. The said toothbrush was described in now canceled claims 1-4. The said toothbrush comprises:

- a) a main cylinder having a tube attached to one of the extremes of the said cylinder;

b) a head attached to the extreme of the said tube and located substantially in at the opposite side wherein the cylinder is attached to the said tube;

c) a manual color-coded lever having a first colored side and a second colored side attached to the said tube;

d) at least two bristle groups, one in the upper side of the said head and other in the lower side of the said head; wherein the upper bristle group has first inner bristles and first outer bristles and wherein the lower bristle group has second inner bristles and second outer bristles;

wherein the said upper bristles are shorter in length than the said lower bristles and;

wherein said first outer bristles are shorter in length than the said first inner bristles and;

wherein said second outer bristles are shorter in length than said second inner bristles and;

wherein the said main cylinder comprises a desensitizing agent outlet.

The claimed invention is also directed to a method for preventing and treating tooth sensitivity by brushing teeth using the toothbrush described in claim 1, comprising the steps of:

a) brushing on one side of the mouth, the first colored side of the lever points up while the second colored side points down, whereby, by pressing the first colored side, the upper teeth will be brushed at 45 degrees angle, and by pressing the second colored side, the lower teeth will be brushed at 45 degree s angle also;

(b) brushing the cheek area of the same mouth side of (a) and the opposite tongue area of the said selected mouth side;

- c) brushing the opposite side of the mouth of the selected side in step (a); while keeping the second colored side of the lever pointing up and the first colored side pointing down
- d) brushing the upper teeth at a 45 degrees angle while keeping the second colored side pointing up and the first colored side pointing down; brushing the lower teeth at an angle of 45 degrees while keeping the first colored side pointing up and the second colored side down;
- (e) brushing the cheek area of the same mouth side of (c) and the opposite tongue area of the said selected mouth side.

The said method is described in now canceled claim 5.

A reference or references anticipating or suggesting the above described invention as a whole should disclose all the limitations present in the said toothbrush or the claimed method, respectively. However, the Office Action through the 35 USC 103 rejection only states that the references used disclose selected limitations presented in the invention but not the whole set of limitations described in the claims. Thus, the invention described in the claims has not been considered as a whole-on its totality- by the Office.

C) Deficiencies of Claims Rejection Under 35 USC 103

Applicant respectfully maintains that the described rejection is confusing and acks the basic legal mandatory requirements as described below. The rejection regarding each one of the claims, as presented in the Office action is hereby discussed:

- **Claim 1**

On page 6 of the Office Action, it is indicated that “*Claim 1 is rejected under 35 USC 103 as being unpatentable over Buelow in view of Klupt, Pensky and Raymond.*”

It should be noticed that there is no citation in order to properly characterize each one of the said references. Even though Applicant assumes that the references cited in the Office Action are those included in PTO892 form, it is respectfully argued that the rejection lacks the specificity of pointing out the sources of information used in the rejection of the claim.

Is Buelow a journal article or a patent? if a patent, what is its patent number and its publication date? If a journal article, what is the name of the journal? What is the journal's publication number?

Even assuming that each one of the said references can be properly identified, it is noticed that the Office does not show that all of the above limitations described in claim 1 are indeed disclosed in the said references. Indeed, it gives the impression that each one of the said references teaches different toothbrushes and that The Office has been selecting limitations from different references as described on page 6 of the Office Action, wherein it is described:

“Claim 1 rejected under 35 USC 103(a) as being unpatentable over Buelow in view of Klupt, Pensky and Raymond.

The Buelow reference discloses a toothbrush comprising a main body 12, a tube with head and outlet 14, a lower bristle group (furthest right bristle group in Figure 2), both groups having shorter outer than inner bristles (see Figure 2), a cartridge 16, “dispensing piping” (dispensing agent to pump) 28, “return piping (returns agent to exterior or toothbrush) 20, a pump mechanism 38, and “operating buttons” 34 and 26, but does not disclose that the main body is a cylinder, a color-coded lever, that the bristles in the lower bristle group are shorter than the bristles

in the upper bristle in the upper bristle group, or dispensing of desensitizing agent/fluoride. However, the Klupt reference discloses a similar toothbrush which has a cylindrical main body (see Figure 1-3) for improved gripping and which dispenses fluoride (see col. 1, lines 9-10) to assist in chemically cleaning the teeth of the user. It would be obvious to modify the Buelow main body in view of Klupt to be cylindrical for improved gripping and to employ fluoride in the agent that is dispensed to assist in chemically cleaning the teeth of the user.”

Notice that the Office acknowledged that Buelow’s reference lacks to disclose multiple limitations disclosed in the instant invention such as: **the main body being a cylinder, a color-coded lever, bristles in the lower bristle group being shorter than the bristles in the upper bristle in the upper bristle group, or the dispensing of desensitizing agent/fluoride.**

Moreover, a close look at Buelow’s toothbrush clearly shows that the said toothbrush is significantly different to the toothbrush disclosed in the instant invention, comparing for instance, figures 1-3 of the instant invention and figure 1-3 of Buelow, wherein the nature and physical forms of the handle, the head brush and the bristle types all are different.

It is also noted that the secondary reference, cited as Klupt does not disclose those limitations that are not found in Buelow since it is asserted that Klupt only discloses “*a similar toothbrush which has a cylindrical main body*”. Indeed, Klupt’s toothbrush is very different to the one disclosed by Applicant. For instance it has a particular internal handle chamber very wide and in form of hexagonal units interconnected to each other that are not found in the instant toothbrush.

Nonetheless, the Office concluded that **“It would be obvious to modify the Buelow main body in view of Klupt to be cylindrical for improved gripping and to employ fluoride in the agent that is dispensed to assist in chemically cleaning the teeth of the user.”**

Therefore, the Office action does not consider the instant invention as a whole, as required by *Graham v. John Deer*, 383 US1, 148 USPQ 459 (1966) and MPEP chapter 21, Section 2141, since taking together Buelow and Klupt do not disclose all the limitations of the invention as acknowledged by the Office.

Regardless of the fact that not all of the limitations of the claimed inventions are indeed disclosed by the Buelow and Klupt references, the Office considered that “It would be obvious to modify the Buelow main body in view of Klupt to be cylindrical for improved gripping and to employ fluoride in the agent that is dispensed to assist in chemically cleaning the teeth of the user.” How can it be possible to modify two references and in doing so create a new invention despite the fact that the said references do not disclose all the limitation of the new invention?

The office action also fails to present a legal analysis that sustains obviousness since there is no indication pointing out the particular part of the reference wherein there is a suggestion or a desirability of modifying the teachings of the reference in order to motivate a person skilled in the art- at the asserted level not determined in the Office action-to develop the instant invention. Can a given invention be suggested even though the said “prior art” does not even disclose all the characteristic- limitations- of the claimed invention? The Office is reminded that even in the case wherein the prior art references disclose all the limitations of the invention, there is an obligation of the Office

of demonstrating a real motivation of combining the said prior art references in order to suggest the claimed invention. The Office Action has fails to disclose the particular motivation or the desirability to combine references and thus the obviousness of making the combination of the said references. Nonetheless, even in the sake of the argument that the said motivation can be found within the reference, the said references cannot be combined to produce an invention whose limitations are not totally found in the references that would be combined. It is noted, that the said conclusion, while only requiring the Buelow and Klupt reference, nonetheless at the beginning of the rejection it is said that claim 1 is **rejected under 35 USC 103(a) as being unpatentable over Buelow in view of Klupt, Pensky and Raymond**. Clarification is respectfully requested, since it is not clear what are the references that indeed are use to reject claim 1. It should be noticed that after the mention of Buelow and Klupt, the Examiner includes Pensky reference in order to conclude that the combination of **Buelow and Pensky the references would render the instant invention obvious.**

However, Pensky's toothbrush is a reference from 1958 wherein the novelty is to provide an *improved handle for a toothbrush* (see column 1, lines 33 to 36). Buelow on the other hand, is a reference dated 1975. Therefore if the position of the Examiner about the obviousness of the instant invention is at least probable, it would be possible that by the time Buelow's toothbrush was conceived it would have been obvious that Buelow would have integrated the Pensky's disclosure in order to create the instant invention. However, Beulow does not create the instant invention because of the fact that both references, together or individually lack to disclose the limitations of the instant invention and even more importantly, there is no motivation to combine the said references in order

to end up with the toothbrush disclosed by Applicant. Similarly, after the mention of Pensky, the Examiner requires yet another reference: Raymond and further concludes that the instant invention is obvious over the Buelow and Raymond references.

Regarding the Raymond reference, it is directed to a toothbrush having a shank in an extremity thereof with a projection in integral relation in such a way that mouth areas suffereing from gingivitis can be early detected, see column 2, lines 16 to 23. Raymond's toothbrush is significantly different from the instant toothbrush, for instance, it has a different body shape, bristles size and distribution and does not dispense any medicaments to fight a given disease.

It is respectfully noted that the Examiner has chopped all the limitations presented in claim 1 in order to select some limitations of the claims and presenting three different rejections to a single claim-Claim 1- based upon combining the Buelow reference with three different references individually used and further admitting that each one of the said three references-Klupt, Pensky and Raymond –disclosed different limitations. It is indicated for the record, that the said practice is contrary to the current patent practice as indicated in Graham v. John Deere, 383 US1, 148 USPQ 459 (1966) and MPEP chapter 21, Section 2141.

- **Claims 2-4**

The same type of analysis presented in the rejection of claim 1 are included in the rejections of claims 2-4 increasing the lack of clarity of the rejection as well as the lack of basic legal requirements as establishedby In re Graham, supra. While it is asserted that the said claims 2-4 are rejected under 35 USC 103 as being unpatentable over Buelow, in view of Klupt, Pensky, and Raymond as applied to claim 1 and further in view of

Lustig,-does the lack of legal precision and accuracy of rejection of claim 1 already discussed above-are directly incorporated- it is clear from the body of the said rejection that the only references used in the rejection are Buelow and Lustig, see page 7, line 17, wherein it is indicated that:“it would have been obvious to modify the modified Buelow device to employ a drive shaft and an electric motor in a housing covered by an access cover in the main body in view of Lustig to rotate the bristle groups for improved tooth cleaning”

Thus, the rejection of claims 2-4 is even more confusing than the already confusing rejection of claim 1. It should be noted that the Examiner already stated that Buelow does not disclose multiple limitations of the instant invention. Therefore, multiple limitations of the instant invention described in claims 1-4 are not disclosed by Buelow or Lustig, as stated by the Office and consequently, the said references cannot be combined to suggest the instant invention, even if the said references would contain a motivation to combine them.

Indeed, Lustig's reference discloses a powdered system able to provide multiple dental treatment having a single powered handle that operates interchangeably with a fluid dispensing nozzle implement for spray and irrigation, with a rotatory treatment implement and with a revolving bristle brush implement, (see column 1, lines 19-28). It is noted that the said bristle brush, is significantly different to the one of the instant invention, see Fig. 11, wherein it is illustrated as having 6 different sections. Thus, Lustig's apparatus is substantially different in nature and physical form to Applicant's invention.

On the other hand, it is unclear what is the meaning of the phrase “*modified version of the Buelow device*”. Clarification is respectfully requested. If the rejection has incorporated other references, what are the limitations of the claim invention that each of the said references disclose? Where is the motivation to combine the said references?

Claim 5

Rejection of claim 5 under 35 USC 103 is confusing and it is not clear if the extra reference being included is Rauch as indicated in the last line of page 7 of the Office action or if on the contrary, if the said reference is Gardener, as indicated in the first line of page 8 of the Office Action. Clarification is respectfully requested.

Regardless of which reference -Rauch or Gardener- is indeed used- the Examiner is respectfully reminded that claim 5 is drawn to a method of using a particular toothbrush; it is not drawn to a toothbrush. Moreover, the cited references should disclose **All** the limitations of the claimed method, not only some of the said limitations such as “the gripping of the toothbrush and the brushing at 45 degrees angle”. Once again considering that the claimed method on canceled claim 5 had the particular limitations described in steps (a) through (e), it is clear that the Office has fails to establish a prima facie case of obviousness since: the cited references do not disclose all the limitations of the claimed method nor the Office has point out the motivation to combine the cited references in order to create the claimed method. Indeed even in the sake of the argument that the said motivation can be found, it is clear that the claimed invention cannot be suggested because the references to be combined do not disclose all the limitations of the claimed method.

It should be noted that the Office asserts that claim 5 is rejected over Buelow, in view of Klupt, Pensky and Raymond in further view of Rauch-or Gardiner- It also should be noted that the Office concludes the said rejection by indicating that:

“it would be obvious to utilize the modified Buelow toothbrush with the method taught by Rauch for improved cleaning of the teeth”.

Is the canceled claim 5 being rejected over Buelow and Rauch-or Gardener- only or the rejection also includes the Klupt, Pensky and Raymond references? If all the references are included, what limitations of the claimed method are disclosed by each one of the said references? Furthermore, it is noted that the Office once again does not clearly point out the place in the reference wherein there is a motivation of combining the references. Contrary to the Examiner’s position, neither of the cited references-including Rauch or Gardiner- disclose or suggest the method claim in canceled claim 5, since the said method requires the novel toothbrush claimed in canceled claims 1-4 or other particular limitations described in the said method claim.

V) Prior art made of record but not used in the rejections

The Office has cited the following references even though it has not relied on them for purposes of rejecting the subject matter herein claimed: Owens, Fortenberry, Gardiner, Stvartak, Jeannett and Earle. It should be noted that no patent number is provided.

Regarding the Owens reference, the Office indicates that “Owens reference discloses a similar toothbrush”. Nonetheless, it is unclear what is the other toothbrush being part of the said comparison and more importantly what are the particular limitations found in the apparent compared items.

On the other hand, the Office also indicates that the Blasi and Fortenberry's references disclose toothbrushes wherein the rotation direction of the bristles can be reversed; the Gardiner and Starvack reference disclose tooth brushing methods "similar to that disclosed". Notice that it is not indicated who disclosed the comparative method. Presuming the alleged method is the one claimed by Applicant, it is unclear how a method that requires a novel toothbrush can be anticipated or suggested when the said essential element: the toothbrush has not been showed to be anticipated or suggested by the prior art.

The Office also pointed out that the Jeannett reference discloses a toothbrush with a multi-colored lever as the handle while the Earle reference disclose a toothbrush with levers.

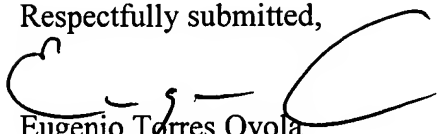
It is respectfully argued that in order to properly and legally reject a given claim, the Office has to show that all the limitations are anticipated by a given reference or that the said limitations are all found in a series of references wherein there must also be a clear reason to combine all of the said limitations. While the said references may describe toothbrushes with a particular limitation(s) none of them, alone or in combination anticipate or suggest the instant toothbrush or the method of using the same as described in the presented claims.

Conclusion

In view of the previous discussion, it is believed that all the issues resented in the previous Office Action have been properly addressed. It is believed that new claims 6 to 12 are in condition for allowance, thus Applicant respectfully requests that a timely Notice of Allowance be issued in this case. If the Examiner considers that there is any

remaining issue, he is encouraged to call Applicant's representative to the phone number indicated below.

Respectfully submitted,



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